

Floodplain Studies Progress Overview

Mayor's Floodplain Task Force

September 24, 2002

○ Overview of Study Elements Presented:

- ▶ Oct 2001 - COE Floodplain Management Strategies
- ▶ May 2002 - COE Preliminary Salt Creek Info
- ▶ July 2002 - COE Preliminary Dead Man's Run Info
- ▶ Aug 2002 - COE Engineering and Econ Info for Dead Man's Run
- ▶ Sept 2002 - COE Engineering and Econ Info for Beal Slough

Anticipated:

- ▶ Oct 2002 - CDM Alternative Floodplain Strategies Study Info
- ▶ Nov 2002 - COE Engineering and Econ Info for Salt Creek
- ▶ Dec 2002 - Task Force Recommendations

○ Dead Man's Run Study (33rd to 56th St. - 1.8 stream miles):

- ▶ Overview of CRS Activities
- ▶ Credit for higher regulatory standards
- ▶ Floodplain management strategies used in other communities: Tulsa, OK; Charlotte-Mecklenburg, NC; DuPage Co, IL; State of Montana

○ Dead Man's Run Study (33rd to 56th St. - 1.8 stream miles):

- ▶ Existing Floodplain: 605 structures in 100-yr floodplain
\$31.9 mil damage for 100-yr flood
- ▶ 50% Loss Flood Storage: 0.24' average increase in flood heights
0.48' max increase in flood heights
36 add'l structures
\$2.6 mil add'l damage
- ▶ 1' Rise in Flood Height: 1' incr. in flood heights assumed per FEMA
151 add'l structures
\$10.9 mil add'l damage
- ▶ 100% Loss Flood Storage: 1.11' average increase in flood heights
2.82' max increase in flood heights

○ Dead Man's Run Study, Cont'd:

- ▶ 0.5' -Rise Floodway: Increases Floodway width from 0'-1080', depending on location. Fill in flood fringe would cause $\leq 0.5'$ rise.

○ Beal Slough Study (Salt Creek to 40th St. - 3.8 stream miles):

- ▶ Existing Floodplain: 74 structures in 100-yr floodplain
\$2.2 mil damage for 100-yr flood
- ▶ 50% Loss Flood Storage: 0.45' average increase in flood heights
1.57' max increase in flood heights
2 add'l structures
\$0.1 mil add'l damage
- ▶ 1' Rise in Flood Height: 1' incr. in flood heights assumed per FEMA
33 add'l structures
\$1.9 mil add'l damage
- ▶ 100% Loss Flood Storage: 2.09' average increase in flood heights
4.33' max increase in flood heights

○ CDM Alternative Floodplain Management Strategies Study Elements:

- ▶ Impact of current standard on public drainage infrastructure
- ▶ No Net Rise AND Compensatory Storage standard
- ▶ 'Cluster Development'
- ▶ Economic Impact of Higher Standards
- ▶ Floodplain 'Mitigation Bank'
- ▶ Floodplain Buyouts
- ▶ Greenfield Strategy
- ▶ Best Management Practices